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ABSTRACT

A universal language is needed whereby the international community can communicate in professions of common concern, and English is such a world language. Preparing the international community to read at functionally literate levels in English will strengthen and facilitate international trade. For career education purposes, a close link between education and work should be forged. Adults need to understand how concepts and procedures can function as tools for solving relevant problems. Teaching strategies and learning theories that should be considered for use with limited-English-proficient adults include: Lev Vygotsky's learning theory; Jean Piaget's notion of schemata; cross-curricular teaching strategies; reciprocal thinking; and small group instruction. Speaking and listening are central to learning and thinking, and are fundamental to learning both in school and throughout life. The teaching of basic skills should not preclude other goals such as reasoning and critical thinking. Members of the international community with limited English proficiency need a knowledge of concepts named in the English language. Providing students with a unique and valuable language experience, the "Easy Steps to Reading Independence" (ESTRI) program integrates reading with listening and speaking. The processes followed in the ESTRI program meet the needs of students with a wide range of previous levels of academic achievement and ethnicity. More investments in education and training are necessary for the long-term economic health of the international community. (Contains 33 references.) (RS)

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HOW CAN THE INTERNATIONAL COMMUNITY READING AT LEVELS 0.0-4.0 IN ENGLISH BE PREPARED FOR SKILLED PROFESSIONS IN FIELDS WHERE A COMMAND OF THE ENGLISH LANGUAGE IS ESSENTIAL?

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Abstract

Several powerful forces are converging to transform the global economy by redesigning and redistributing jobs exacerbating inequalities, reorganizing cities and regions and profoundly affecting families and individuals These forces are technological breakthroughs in microelectronics, the globalization of the economy capital fluidity, and shifting from an economy based on the manufacture of goods to one based on information and service (Talbert 1993) Society is becoming more fragmented and conversely the world more interdependent as technology improves life while making it more complex There is need of a universal language whereby the international community can communicate in professions of common concern English is a world language Preparing the international community to read at functionally literate levels in English will strengthen and facilitate international trade

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Compounding the problem of unemployment is the fact that higher level literacy skills are required in order to pursue and succeed in the training required to stay up-to-date in the face of changing technological requirements For example changes in technology have presented the construction industry with a dilemma To read the plans, speculations, manuals, and contracts that are part of the job, craft workers must possess at least the equivalent of 10th to 13th grade reading level Yet U.S national data suggest that the literacy levels of some workers in the crafts are considerably below those now needed for the job Furthermore a recent survey of the 1993 local member unions in Ohio indicate that 30% of workers in each union were below the level of functional literacy of any particular craft The problems of illiteracy and numeracy in the workplace must be addressed

The ever-faster pace of technological change and the increase in competitiveness of work places and economies around the globe have opened challenges to maintain a comfortable standard of living for the people of the world According to a report by the U.S. Secretary of Education's Commission on Achieving Necessary Skills (Scott, 1991), a strong back, eager hands, and a high school diploma used to be enough to get a job, keep it and make it into a career Before 1973 the poor could hope to break out of poverty because jobs were generally available to those who were willing to work, even if the prospective workers were immigrants or school dropouts Now, the need to keep abreast of technological change and to participate effectively in today's high performance workplace requires each worker to possess a set of basic competencies and a set of skills and personal qualities

Hard physical labor is rarely needed in a high-tech society Moreover, those few available unskilled jobs now offer low wages and few if any benefits or opportunities of advancement In the United States real weekly wages fell 14% between 1973 and 1986 During these same years the already low real wages for black

men in poor areas dropped 50% (Talbert 1993 If current trends continue Latinos will surpass African Americans in the largest racial minority by the year 2020 so real wages will continue to drop

Communities corporations and schools have had difficulty in providing minorities with the services they require because of the language and cultural barriers Disadvantaged young people could end up as society s losers and most Americans will blame them for their failure

Foundation skills and qualities for communicating whether local or international require the basic skills of reading and writing speaking and listening thinking skills in judgment and creativity; decision making mathematics and skills of problem solving Knowing how to learn and reason must complement personal qualities of responsibility, self-esteem sociability, self-management and integrity

Developing higher level cognitive capacities goes beyond giving a lesson or two on thinking skills Applying cognitive development in vocational curriculum and instruction builds on the strengths of vocational education to develop higher order skills needed in the spheres of work family community and society

Characteristics of creative thinkers are perseverance flexibility metacognition transfer of knowledge problem orientation open-mindedness use of quality standards and possessing independence (Lee 1959) a list that resembles many descriptions of the desirable qualities of the future's workforce

Thomas (1992) notes that occupations are becoming more reliant on cognitive capacities and the changing work environment requires flexibility and adaptability to changing conditions Vocational education provides a real-world context for cognitive development This does not imply a narrow work-focused education Rather vocational education is a vehicle for developing the cognitive skills needed for a productive full and satisfying life

Learning. Teaching should be given in context --"learning to know," should not be separated from "learning to do." Improving the match between what work requires and what is taught necessitates changing how instruction is delivered and how people learn. Perhaps the most essential element of career education is the close link it imposes between education and work Career information for career decision-making skills is academic Basic skills technological skills information gathering skills and interpersonal skills must pervade all education People must be able to see the true relevance of instruction to their own future in the world of work Visible evidence helps increase both motivation and learning The ability to think creatively, make decisions, solve problems, visualize, reason analyze, interpret, and know how to learn--these skills are most often mentioned in definitions of critical thinking

Concepts organize information which is not dependent upon the immediate conceptual array and are at least potentially nameable Without these attributes concepts do not yet exist Comprehension involves ability to grasp such concepts as

main idea facts sentence inference and critical thinking Knowledge the active transformation of experiences arises out of the interaction between stimuli and process ,The combination-information of features is the second stage of perceptual order of perceptual learning It represents learning after acquisition of a new code Implicit is the use of the term "combination" in the ordered grasp of knowledge

Taken as a whole studies of acquisition suggest that adults need to understand how concepts and procedures can function as tools for solving relevant problems This type of learning results in knowledge operations that are organized with respect to the triggering condition of specifying their applicability Relation of the items to each other and to the problem at hand arise as a merging set of features (Simon 1980) Simon emphases five components to learning define, explore, account for, locate, and learn These form what he calls the IDEAL approach to problem solving

The learning theory that is compatible with a great deal of this work is that of Vygotsky who believed that learning involves the internalization of activities originally witnessed and practiced in cooperative social settings, that is people learn by participating in group activities in which they are exposed to a variety of models who differ in expertise (van Daalen-Kapteijns & Elshort-Mohr, 1981) The acquisition of word meanings is a cognitive learning process It is the expert's job to provide assistance for the novice's inchoate learning processes until such assistance is no longer needed The principles of naturally occurring instructional methods repeatedly observed, as are used by master crafts people with their apprentices, can be adapted to successful course instruction (Wolford & Littlefield 1985)

Piaget s theory of schemata might be considered similar to that of Vygotsky in some respects His theory consists of a framework for tying together the information about any given concept or event with specifications about the types of interrelationships and restrictions upon the way things fit together (Lagan 1980) Schemata data functions represent concepts stored in memory They exist as generalized concepts underlying objects, situations, events, sequences of events and sequence of actions Essential characteristics of schemata combine to make them powerful representations in knowledge and memory.

The contribution of the process sorter brings a variety of capacities and strategies to the task of making sense out of the stimuli objects and events of the world which impact on consciousness This process is repeated for each subordinate skill until basic knowledge and skills are identified The result is a learning hierarchy that indicates the skills that should be included in the instruction and the sequence

Schemata can impend one on the other. They represent generic concepts which taken all together vary in their levels of and representative of knowledge rather than in definitions From schema theory comprehension is understood to be an active and constructive process in which the learner is constantly reviewing what is known linking new information to prior knowledge forming and deepening

the hypothesis about the meaning of what is read or the problem to be solved assessing appropriate study strategies and revising concepts and ideas as new information is acquired Changes in the individual's cognitive structure such as developing reading ability and mastery, materialize as a function of specific identifiable events facilitated through rule development

People learn naturally to communicate orally, but they don't necessarily learn to do so effectively In a study by researchers Venderplank & Daly (5) a nationally representative sample of more than two hundred people, aged 22-25, were asked to perform a number of oral communication tasks Based on the responses Venderplank & Daly concluded that one-fourth of the sample could not adequately communicate orally

The expanding knowledge base instruction in basic reading skills must be seen as part of the larger task of solving authentic problems Learning tasks organized around the notion that students must master basic skills before advancing to higher order ones are misguided Disadvantaged students in remedial reading programs are too often programmed for the discrete skills without the benefit of a challenging or engaging content (Anderson, Hiegert & Scott, 1985) Students react initially within the context of their own linguistic environment rather than within a language environment that is unfamiliar to them Their use of oral language grows and is used to develop language acquisition, production, recognition and prediction abilities (Dunn, Dellavalle,et al 1986)

Cross-curricular teaching strategies that integrate functional literacy skills with program content and multicultural goals in all subjects should be provided for the limited English proficient student population This nontraditional population can gain literacy skills simultaneously with mastery of program coursework In this way students will be prepared for a world that will demand flexibility creativity and the ability to adapt positively to change Without well-rounded skills the student will be inept at dealing with the changes and varieties they are likely to encounter in the workforce.

Cognitive research demonstrates that learning is not automatically transferred to new settings Context is critical to understanding Passive learning does not develop cognitive management skills Higher order learning is not a change in behavior, but the construction of meaning from experience (Thomas, 1992) Recent findings of cognitive research provide a better understanding of how people learn and how they solve problems, from which new teaching strategies are emerging Thomas (1992), identifies three types of cognitive theories upon which teaching strategies can be based Information processing theory explains how the mind takes in information Knowledge structure theories depict how knowledge is represented and organized in the mind Social history theory explains the vital role of cultural context in the development of individual thinking In this view learning is characterized as an active process with which the learner constructs knowledge as a

result of interaction with the physical and social environments Learning is moving from the basic skills and pure facts to linking new information with prior knowledge, from relying on a single authority to recognizing multiple sources of knowledge, from novice-like to expert-like problem solving Thomas, (1992) presents general principles and relates teaching methods to integral aspects of all three perspectives helping students organize their knowledge and build on what they already know Advance organizers such as rules analogies or concrete instances help students organize the similarities between new information and previously acquired knowledge Facilitating information processing teachers model problem-solving demonstrating their thought processes strategy selections and response to mistakes Facilitating teaching through elaboration makes thinking processes explicit (Honan 1993)

In reciprocal thinking, the teacher models desired approaches summarizing and predicting what would happen next in the text Students gradually take on the teacher s role Following teacher behaviors promote cognitive development requiring justification for ideas and reciting reasoning strategies confronting students with alternatives and thought-provoking questions asking open-ended questions, requiring students to be accountable for class discussion (Chalupa 1992)

Among the many areas that need to be considered when implementing the small group approaches to teaching the most important are selecting and training leaders assigning learners to groups, choosing materials and assisting learners in assuming new roles (Cheatham 1990). Cheatham states that adult literacy and basic education small groups often fall into one of four categories dysfunctional (no participation from members) leaderless (no exchange of ideas) on-task (willing to talk and listen but no sharing of meaningful information) and functioning (on-task and involved) The ideal is functioning groups because there is a sense of trust and expectation that learning will occur

Ennis and Davison (1989) point out that the major advantages of functional groups include the allowance for integration of critical thinking and other language processes Thinking listening writing, and reading can be interrelated and the spoken word can interact with the written word The breakdown in isolation and stigma frequently expressed by students with insufficient literacy skills is supported in peer learning This enhances learners' self-esteem by helping them understand that they have much to offer as a result of their experiences. Through the collective expertise of the group members, is made available a wide range of resources including the thinking experiences, and help and encouragement of the other group members

Major disadvantages of group learning include accommodating a wide range of needs and abilities The needs of individuals in a group have to be reconciled with the needs of the group as a whole and thus, tension may arise between centered and group-centered or collective approach Negotiating learner-centered curriculum in

a group can be difficult In addition to teaching skills group directors also need group leadership skills for the group to be successful

According to Bingham, Merrifield, White, et al (1991), effective groups are small in size, ranging from five to fifteen learners. They are learner-centered in that they seek to adapt the curriculum to the needs and interests of the learner They are experiential because they seek to incorporate learners' experiences skills and ideas in the teaching They are cooperative since learners commonly help each other and act together They are participatory, in that learners have a say in what is taught and how it is taught rather than being passive recipients The role of the director is that of a facilitator of learning and leader rather than that of a person conveying information

Speaking and listening skills. The report from Study of Academic Instruction (SAI) notes that classroom practices may tend to underestimate what students are capable of postponing more challenging and interesting work perhaps indefinitely, and failing to provide a context for meaningfully employing the higher skills they are taught (Scales & Burley 1988) The Study focuses on both the text content and the students understanding of the goal of the strategies they are using to determine whether the students are aware of why they can be required to use the strategies and how critical reading and study work The teacher provides feedback that is tailored to the students' existing comprehension levels, encouraging them to progress toward full competence. The responsibility for the comprehension activities of the goals is transferred to the students as to what is possible As students master one level of involvement teachers increase their demands so that they are gradually called upon to function at more challenging levels finally adopting the leader role fully and independently (Brown & Canpioni 1986)

Building on listening and speaking skills. Of all basic skills speaking and listening are the most fundamental to learning both in school and throughout life, according to experts in the field of oral communication Science has demonstrated the tremendous language strength and language learning strength universally present among people of all backgrounds including those whose home dialect is different from the teacher s According to Dr Rubin Visiting Professor of Communication Arts of the University of Cincinnati experts in the field advocate integrating instruction in speaking and listening skills across the curriculum These include free skills areas of speaking, listening, creative drama non-verbal communications and mass media awareness (O'Neil, 1992)

Perhaps the most powerful argument in favor of instruction in speaking and listening skills, experts say, is their centrality to learning and thinking Oral communication, listening and thinking are integrally related Reading oral communication listening and thinking are more integrally related than are reading and writing Students would for example much rather ask a question and engage in oral communication listening and thinking about the subject in question than have

to be frustrated by the lexical forms of the written argument even if is is expressed in the idiom of the student Teachers often assume that students already have these skills Curriculum developers have not given speaking and listening much attention and these skills are typically not taught.

Students learn by orally creating informational quizzes, visual and listening models brainstorming, designing peer problem-solving activities, or predicting text questions Teachers can help students learn speaking and listening skills by teaching them to summarize orally, talk aloud when solving a problem and work collaboratively Students should be able to identify and apply techniques for effective listening and to construct and deliver a persuasive speech Educators need to teach standard English to empower students within the mainstream culture Teachers need to call attention to the process of expressing oneself clearly and listening critically, so that word meaning can be later transferred to the student s reading and writing vocabulary.

Development of functional literacy skills Research on reading as a cognitive task has focused on reading as an active process with three questions of concern How do learners learn to identify the printed word? How do they discriminate it from each other word? How do they recognize it upon seeing it again in a different context? Functional literacy encompasses the ability to draw inferences, to separate facts from opinions, to arrive at conclusions, to predict outcomes, and to interpret words and phrases in context.

In order to understand text, readers must recognize words and analyze syntax Also they must access and organize the appropriate conceptual knowledge This depends on a variety of analytic skills knowledge and processes Reading difficulties reflect inadequate development of one or more of these processes

Reading requires syntactic awareness that is generally not required for listening There are two classes of difficulty at the syntactic level the completeness with which readers can link the meaning of the text onto their own conceptual structure and the readers' ability to usefully organize the meaning of the passage Other problems are lack of appreciation of pragmatic determinations of discourse differences between the dialects of the students' reading materials and the oral language environment difficulties in coordinating references difficulties between metaphor and figurative language and difficulties in appropriately altering the point of view Readers' ability to organize concepts in a text is crucial to comprehension. In order to comprehend the passage, the reader must be sensitive to the relative importance of various concepts introduced in the text (Johnson 1955)

Two systems interact in language development grapheme-phoneme and syntactic-semantic. These cannot usually be separated for instruction without creating non-linguistic abstractions and nonsense. Reading of words is accomplished by two separate but interrelated processes sight word recognition and decoding Sight word recognition includes a process of matching the visual perception of the

word with a visual template stored in long term memory during original learning The process of decoding includes analysis of the word into parts retention of sounds in correct sequence, and blending of the sounds to represent the word in inner speech The person must be able to detect perceptual differences, perceive likenesses and differences, remember word forms, and associate symbols with pictures and objects. Decoding is a process by which words not automatically recognized are translated into inner speech providing the equivalent of hearing the word If readers cannot recognize a word as a whole word they must organize a set of subabilities at the next lowest level such as phoneme-grapheme correspondences and blending abilities to sound out and synthesize the word

Poor memory can prevent mastering of decoding skills to an automatic level A reader lacking fluency will be stuck at a level of attending to the mechanics of reading and further comprehension training is unlikely to have any value Students must be helped to discriminate and remember letter and word shapes and minimize reversal problems

According to Rosenwasser (1986), phonics carefully taught facilitates reading making students independent readers so much sooner Phonics is a distinct aid because it promotes simultaneous analysis of the word by hearing it by recognizing it auditorially and by contextual analysis Phonics instruction has a common goal to teach how to figure out the pronunciation of unfamiliar written words by using the relationship that exists between phonemes and graphemes (Maclean, 1955)

The memory load that is frustrated by having to learn hundreds of new and ever less discriminable words quickly becomes excessive Graham (1952) explains that as the differences between and configurations of words become ever so fine with letters curving to the left and right and upward and downward the limited English proficient reader especially, becomes confused and loses confidence The functionally illiterate are probably disabled readers because they were introduced to words at an ever-increasing rate and they find it harder and harder to make the fine discriminations required to identify the words The problems of visual discrimination do in fact increase proportionately as the rate of the introduction of new words increases (Maclean 1988)

In the English language, the reading disabled person has great difficulty in acquiring phonic skills The mismatching of phoneme (letter sound) and grapheme (printed/written letter) is at the heart of the problem for many thus disabled (Durkin 1983) Disabled readers have a tendency to guess wildly at words They pay attention to specific letters and guess wildly at the rest The reading disabled student has an unusual amount of difficulty with similar-shaped words such as bed and 'fed' They vocalize excessively while reading silently (Lewis 1957) Inefficient word recognition processors lack sufficient knowledge of the multiple sources of information provided by the orthographic constructs of English and as a result they are overly dependent on sight knowledge of familiar words Skilled readers in

contrast, decode words effectively because of the simultaneous activation of overlapping sub-word utilization, as, for example, letter clusters syllables and phonograms Hence, the kind of training less skilled students need involves arranging conditions so that they must attend to sub-word letter strings during word recognition (Beck & Carpenter, 1986)

Inability to process sound-letter correspondences leads to hysteresis the inability of the short term memory coding mechanism to keep up with the demands placed on it by too much data being presented at one time Skilled reading depends upon perceptual linguistic and cognitive processes in the English language which are often absent from the repertoire of the reading disabled bilingual student (Stanovich Cunningham & Feeman (1984) contend that simply to notice relevant features of a pattern is not sufficient to identify the word uniquely

Meaning is constructed during listening and reading The reader develops meaning by drawing on prior learning and experience while interacting with the text Attention must be shifted in instruction away from words and towards comprehension of meaning Meaning is available if the word is in the reader s hearing and speaking vocabulary Many students who can decode have trouble with the higher level of reading comprehension

Like young readers, functionally illiterate adults are still developing reading skills As adults, however, they have a wealth of knowledge and experiences to bring to bear in reading situations Teaching Advanced Skills to Educationally Disadvantaged Students a report from the Study of Academic Instruction summarizes some of the powerful intellectual skills even the most educationally disadvantaged adults possess the experiences and receptive skills of their native language basic facts about quantity and insights about social expectations

The traditional means of teaching beginning reading start with primary level grades and take several years to lay a workable foundation for higher level reading skills This process is too cumbersome and time-consuming for the limited English proficient adult who must master higher level material immediately and has not internalized the communication code necessary to do so In using phonics and finding beginning, middle and final sounds in a word, reading disabled adults have problems in putting the sounds together to make the word Some are handicapped because they are not able to discriminate between the various semantic elements of words or they do not hear or speak the word correctly, and thus confuse words People do not learn to pronounce distinctions that they have not heard spoken Since phonics does not offer help with word meanings, it is productive only with words already known in their spoken form (Durkin, 1983).

Practical application, understanding and challenge motivate low literate adults to learn What is being proposed here is not that the functionally illiterate do not need to master basic skills but that the means toward teaching these skills shouldn t be allowed to preclude other goals such as reasoning and critical thinking (Ziegehas

Higher level reading materials do not necessarily use the student's own language and the content often treats of subjects beyond their immediate experience The curriculum for bilingual students is built upon a platform of knowledge of concepts named in the English language which the reading disabled bilingual students may not know or know in a very limited manner. Members of the international community who are non-readers in the English language or whose mastery is very limited, need to be enabled to gain this skill as quickly as possible

Easy steps to reading independence Providing students with a unique and valuable language experience, the Easy Steps to Reading Independence (ESTRI) (Biggins, 1990) program integrates reading with the two other linguistic skills of listening and speaking The ESTRI program curriculum emphasizes the thinking through of several flexible strategies for enhancing comprehension and comprehension mastery, thus overcoming mind-wandering in reading and breaking the word-by-word reading habit Students learn to trust each other to verbalize what they do understand and clarify what they don t understand The cumulative learning style provided in the ESTRI program helps the students to overcome deficits such as poor visual discrimination of words being learned poor memory for sounds and interference when several things are being integrated at one time The ESTRI program guides the student in the difficult independent work of getting started with words changing stems, organizing, maintaining attention, overcoming the inconsistent achievement of knowing things on one day and not others, or the overactive impulses of hyper- activity, the impulsive rushing into tasks and activities without forethought, which interferes with learning

The ESTRI program proceeds along the lines which have been referred to as cognitive instruction, the efforts on the part of the teacher or the instructional material to help students process materials and information in meaningful ways (Samuels, 1988). Students become independent learners by constructing meaning from reading, solving problems presented in print, and developing effective reading/thinking/learning strategies They select appropriate strategies and take responsibility for their own learning They learn to transfer skills and concepts to new situations, using critical and cognitive thinking, memory and metacognition

Each lesson of the ESTRI program has two focus points One focus is the recognition of consonants and vowels in syllables Focus is on the distinctive sound-symbol relationship of one letter at a time This focus supports overlearning of the sound-symbol relationship in isolation, developing automation of response, and becomes spiral and cumulative as the other consonants and vowels are introduced Students find more examples in words using materials of their own choosing or textbooks, which contain the particular sound-symbol relationship in whatever place it occupies in the word A simplified decoding skill based on recognition of syllables in words is taught No 'exceptions to the rule' are presented

The other focus point is the simultaneous development of higher order thinking skills such as literal interpretation, creative comprehension, inference and reasoning, through the oral communication medium of listening and speaking As an example, a sample page taken from the ESTRI program, focusing on the /j/ jump letter-sound correspondence, shows in exercise 1 a picture of a jeep. This picture, as suggested in the Teacher Manual, can be used to prompt an inter-cultural discussion and activity All cultures have their own methods of traveling The jeep is a car very popular in the United States A little questioning and discussion can bring students to talk about transportation native to their own culture

Biggins & Sainz (1988) stress that listening, language development and cognitive skills in course content areas should be developed and strengthened while the decoding process is being developed, and that students should be enabled to comprehend what is said and follow directions; remember verbal materials such as directions and facts distinguish between similar sounds in words heard remember names and sounds of letters, master the blending of letter sounds into word recognition and express themselves using correct grammar. During this stage they develop appropriate vocabulary so as to avoid using the word 'thing' because they do not know the correct name for an object They develop knowledge and concepts form judgments, reason, and plan

Each time the student learns a new group of words when the syllabilizing skills are being put into place through the ESTRI Program, the learned words are integrated with the previously developed word store and used in reading phrases and sentences with these other words Soon fluency becomes an established skill and transfers to other reading Once fluency with vocabulary word recognition and attention are achieved,transfer to other readings is much easier and comprehension is much higher than before the development of fluency.

Broad questions that guide the activities of developing functional literacy are from categories of questions such as convergent questions, which require analysis and integration of given or remembered facts, questions which require rating or choice and involve matters of judgment rather than mastery of fact divergent questions which require independent generation of ideas, and narrow questions to which the specific nature of the response can be predicted, such as 'yes' or 'no' questions without clarification Students are enabled to take a new perspective or direction through use of such processes as elaboration, divergent association and implication statements involving pairing separating answering or developing ideas or questions elicited by the students

The processes followed in the ESTRI program meet the needs of students with a wide range of previous levels of academic achievement and ethnicity Because of this advantage, the necessity for an educational institution to provide additional and separate tutorial and academic support programs is reduced The history of success with ESTRI in coursework is important because some institutions are now

implementing this program to retain first generation and low income limited English proficient students

Clearly, the President and his Secretary of Education believe that an effective strategy to overcome the nation's economic problems must include a greater emphasis on education and training. But just as clearly, they are not ready to ask for increased appropriations for particular programs until they are convinced that the programs will achieve the desired results. Apparently they do not think that many federal educational and training programs can achieve these results as they are currently structured. If established education and training programs are to receive increases in Clinton's budget, they will first need some revisions to increase their effectiveness (Celis, 1993).

Richard Reilly, Clintons' Secretary of Education notes that the Administration's plan for the longer term is to increase discretionary education spending by 25% over the next five years. He states that the goals of the new Department of Education is to get a framework worked out to develop goals and standards and to work toward systematic reform (Employment in New York City, 1993).

The government must create jobs and supply job training. There must be massive expenditures on education to equalize opportunities from state to state and from community to community. This requires a special commitment to invest extra resources in the disadvantaged by assigning the most creative and effective teachers to them.

Different teaching strategies, alternative assessment methods, and new ways of teacher preparation are needed. Some see gradual changes in attitude reflecting the belief that reading disabled bilingual students with appropriate support are capable of high levels of achievement. Health, financial, legal and public service and information processing industries will rate as leading job producers as they were before the recession (Blong & Shultz, 1990) and the low literate international community must be trained to fill the positions thus opened. More investments in education and training are necessary for the long-term economic health of the international community.

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